

REMARKS

The Examiner is thanked for the due consideration given the application. The specification has been amended to improve the language and to not refer to the claims. A substitute abstract has been provided.

Claims 1-5, 7-15 and 20 are pending in the application. Claims 6 and 16-19 have been canceled by this amendment. Support for the amendments to claim 1 can be found in the specification in paragraph 0064 and in the Examples. Claim 7 has been amended to not depend on a canceled claim.

No new matter is believed to be added to the application by this amendment.

The Specification

The abstract has been objected to as not being within 50-150 words. A substitute abstract has been provided that is within 50-150 words.

Paragraph 0007 of the specification has been objected to as containing a typographical error. Paragraph 0007 has been amended to be free from typographical errors.

Rejections Based on DERSHEM et al.

Claims 1 and 9 have been rejected under 35 USC §102(b) as being anticipated by DERSHEM et al. (U.S. Patent 6,211,320). Claims 2-8 and 10-20 have been rejected under 35 USC §103(a) as being unpatentable over DERSHEM et al. in view of SEIICHI et al. (JP 2001-354836). These rejections are respectfully traversed.

The present invention pertains to a vinyl ether curing composition that includes a polyfunctional vinyl ether compound, a polyhydric phenol compound and a flame retardant.

In contrast, the composition of DERSHEM et al. is a thermosetting composition containing as a principal component a cycloaliphatic bifunctional acrylate monomer that has a specific structure. Thus, the composition of DERSHEM et al. and that of the present invention are entirely different.

The Official Action asserts that DERSHEM et al. teach a composition containing a polyfunctional vinyl ether compound (column 10, lines 35-65), and the polyhydric phenol compound and tertiary-butyl hydroquinone (column 17, line 7).

However, what the Official Action asserts to be the polyfunctional vinyl ether compound is actually an acrylate compound whose terminal group is $\text{CH}_2=\text{CH}-\text{CO}_2-$, which differs from the polyfunctional vinyl ether compound of the present invention, whose terminal group is $\text{CH}_2=\text{CH}-\text{CO}-$.

Moreover, the acrylate compound indicated by the Official Action as a polyfunctional vinyl ether compound, and polyhydric phenol compound and tertiary-butyl hydroquinone are added merely as an optional component.

Furthermore, DERSHEM et al. are silent about an addition of a phosphorus-based flame retardant to a polyfunctional vinyl ether compound and a polyhydric phenol compound. Consequently, it is clear that DERSHEM et al. fail to

teach or suggest 10 to 30 parts by weight of a phosphorus-based flame retardant per 100 parts by weight of the total of the polyfunctional vinyl ether compound and the polyhydric phenol compound.

DERSHEM et al. thus fail to anticipate the present invention. DERSHEM et al. additionally fail to be utilizable as the basis of an assertion of *prima facie* unpatentability.

The Official Action acknowledges that DERSHEM et al. fail to teach flame retardant. The Official Action then refers to SEIICHI et al.

What is disclosed in SEIICHI et al., as indicated by the Official Action, is a fire retardant epoxy resin curing composition containing a fire retardant represented by a formula corresponding to the formula (II) of the present invention and polyhydric phenol represented by a formula corresponding to the formula (1) of the present invention.

However, in SEIICHI et al., the resin to which the fire retardant and polyhydric phenol are added is an epoxy resin, and not vinyl ether as in the present invention.

In contrast, the present invention is a vinyl ether curing composition that includes a polyfunctional vinyl ether compound, a polyhydric phenol compound and a flame retardant, containing 10 to 30 parts by weight of a phosphorus-based flame retardant as the flame retardant per 100 parts by weight of the

total of the polyfunctional vinyl ether compound and the polyhydric phenol compound.

DERSHEM et al. thus fail to anticipate the present invention. One of ordinary skill and creativity would fail to produce a claimed embodiment of the present invention from a knowledge of DERSHEM et al. and SEIICHI et al., and a *prima facie* case of unpatentability has thus not been made.

Further, as evident from the description at paragraphs 0007 and 0020 of the present specification, the vinyl ether curing composition of the present invention can provide a cured product with a low dielectric constant, which can never be attained by a cured product composed mainly of an epoxy compound and a curing agent for the epoxy. This represents an unexpected result over the applied art references that would fully rebut any unpatentability that could be alleged.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Conclusion

The Examiner is thanked for considering the Information Disclosure Statements filed December 15, 2005, March 14, 2006, and September 20, 2006 and for making initialed PTO-1449 Forms of record in the application.


Prior art of record but not utilized is believed to be non-pertinent to the instant claims.

The objections and rejections are believed to have been overcome, obviated or rendered moot and that no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item:

- substitute Abstract of the Disclosure